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Predicting treatment response in psychotherapy for posttraumatic stress disorder - a pilot study

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Abstract: Prediction of treatment response to trauma-focused psychotherapy remains a difficult task. This study evaluated treatment response to Brief Eclectic Psychotherapy for posttraumatic stress disorder dependent on pre-treatment variables, symptom progression, and manual adherence. We tested differences in pre-treatment variables and symptom time course between treatment responders and non-responders in 27 patients, using exact regression analyses and general linear models. Associations of therapists' adherence to the treatment manual during different therapy phases with response status were also studied using independent samples t-test. Lower education and complete inability to work were negatively related to therapy outcome. Significant differences in symptom time course between responders and non-responders were detected from session nine onwards, whereas adherence to treatment was not related to outcome during any treatment phase. Our results indicate that early identification of treatment response may meaningfully expand previous research on outcome prediction based on pre-treatment variables in trauma-focused psychotherapy. Furthermore, adaptations of treatment protocols for specific groups of patients with increased risk of poor treatment outcomes may be advisable. If replicated by more naturalistic designs, our results could contribute towards limiting the requirement of strict manual adherence to efficacy studies in posttraumatic stress disorder treatment research.

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Predicting treatment response in psychotherapy for posttraumatic stress disorder:
a pilot study

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Prediction of treatment response to trauma-focused psychotherapy remains a difficult task. This study evaluated treatment response to Brief Eclectic Psychotherapy for posttraumatic stress disorder dependent on pre-treatment variables, symptom progression, and manual adherence. We tested differences in pre-treatment variables and symptom time course between treatment responders and non-responders in 27 patients, using exact regression analyses and general linear models. Associations of therapists' adherence to the treatment manual during different therapy phases with response status were also studied using independent samples t-test. Lower education and complete inability to work were negatively related to therapy outcome. Significant differences in symptom time course between responders and non-responders were detected from session nine onwards, whereas adherence to treatment was not related to outcome during any treatment phase. Our results indicate that early identification of treatment response may meaningfully expand previous research on outcome prediction based on pre-treatment variables in trauma-focused psychotherapy. Furthermore, adaptations of treatment protocols for specific groups of patients with increased risk of poor treatment outcomes may be advisable. If replicated by more naturalistic designs, our results could contribute towards limiting the requirement of strict manual adherence to efficacy studies in posttraumatic stress disorder treatment research.

Key words: Posttraumatic stress disorder, Brief Eclectic Psychotherapy for PTSD, prediction, process variables, manual adherence

Highlights:

- Lower education and complete inability to work predicted a lack of response to treatment in BEPP.
- Symptom time course differed early between patients who responded to treatment and those classified as treatment non-responders.
- Therapists' adherence to the treatment manual was not related to outcome during any treatment phase.

Recent meta-analyses have convincingly shown the efficacy of psychotherapy for the treatment of posttraumatic stress disorder (PTSD; Bisson & Andrew, 2007). Nevertheless, drop-out rates of up to 20% (Ballenger et al., 2000), non-response as well as poor functioning at the completion of therapy in up to 60% of treated patients (Marks, Lovell, Noshirvani, & Livanou, 1998; Tarrier et al., 1999) demonstrate the need for further development and evaluation of alternative treatment options (Schnyder, 2005).

As a manualized treatment approach, Brief Eclectic Psychotherapy for PTSD (BEPP) provides therapists with detailed instructions on treatment rationale and procedures for every session. It combines self-insight from psychodynamic psychotherapy, imaginal exposure based on psychoanalysis, hypnotherapy and behavioural therapy, writing tasks from cognitive-behavioural therapy, as well as the use of mementos from directive therapy. Additional elements are psychoeducation from cognitive therapy, a phase of meaning and integration from psychodynamic therapy, as well as a farewell ritual from directive therapy (Gersons, Meewisse, Nijdam, & Olff, 2011). The 16 sessions are broken down into four

phases of psychoeducation (session 1), imaginal exposure (sessions 2–7), domain of meaning and integration (sessions 8–12), and farewell ritual (sessions 13–16). Some technical aspects should be emphasized: first, imaginal exposure is aimed at catharsis rather than habituation. Thus, rather than repeatedly recalling complete trauma sequences and aiming at reducing the fear response, exposure attempts to evoke formerly avoided trauma-related emotions as a prerequisite of psychodynamic insight. According to the manual, imaginal exposure should not take longer than 15 to 20 minutes per session. Second, at two time points the patient's partner (or another close person) is invited to a treatment session to secure social support during the treatment period. BEPP has shown to be effective in reducing PTSD symptoms in four randomized controlled trials (Gersons, Carlier, Lamberts, & van der Kolk, 2000; Lindauer et al., 2005; Nijdam, Gersons, Reitsma, de Jongh, & Olff, 2012; Schnyder, Müller, Maercker, & Wittmann, 2011).

Availability of different treatment options raises the question of what treatment is most suitable for which patient. Several studies identified pre-treatment variables significantly predicting outcome variables or treatment dropout. For instance, van Minnen, Arntz, and Keijsers (2002) reported that initial PTSD severity was related to treatment outcome in two different samples treated with Prolonged Exposure, and Rizvi, Vogt, and Resick (2009) found that less education, lower intelligence and younger age predicted treatment dropout. However, the overall picture remains inconsistent leading van Minnen, Arntz, and Keijsers (2002) to conclude "... that it is difficult to use pre-treatment variables as a powerful and reliable tool for predicting treatment outcome or dropout" (p. 439). Thus, identification of non-responders based on the course of symptoms over initial treatment

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sessions might offer a viable extension to predicting treatment response based on pre-treatment variables. Early recognition of a treatment as unhelpful could allow for altering or adjusting the intervention offered and thus minimizing client demoralization as well as waste of resources (treatment time and expenses).

Another possibility for identification of treatment failure may be offered by recognition of deviations from treatment protocols which are emphasized by most current trauma specific treatment approaches. A meta-analysis failed to find a significant relationship between adherence to manuals and treatment outcome (Webb, Derubeis, & Barber, 2010). However, only few studies reported on the effects of adherence to manuals in psychotherapy with adult trauma survivors. Meier et al. (2015) evaluated the treatment of 121 patients with PTSD and substance use related disorders receiving eight to twelve sessions integrated cognitive behavioral therapy. Adherence to treatment assessed in sessions 1 was positively related to PTSD symptom reduction at six months post baseline, while adherence to treatment assessed in session 4 was negatively related to the reduction of addiction severity. Contrarily, in a study of 58 patients treated with cognitive processing therapy, Marques et al. (2019) did not find a significant association between adherence to treatment and the reduction of PTSD symptoms. However, higher adherence to the treatment procedure was associated with a greater reduction of depressive symptoms. Most interestingly, higher number of treatment fidelity-consistent modifications was significantly related with higher reductions in both symptom types.

Given these inconsistencies in available data, we analyzed data from a recent randomized controlled trial to identify possibilities for recognition of treatment response by

considering differences in pre-treatment variables, initial symptom development and adherence to manual with regard to response status.

Method

The study protocol was approved by the local Ethics Committee of the Canton of Zurich, Switzerland. Written informed consent was obtained from all participants.

Sample

Patients were recruited from various sources, including the department of psychiatry at a regional university hospital, other hospitals in the region, and advice centers for victims of rape and nonsexual violence. We also placed several advertisements in the public media. Main inclusion criterion was current full or sub-syndromal PTSD with symptom severity of at least 50 points on the Clinician-Administered PTSD Scale CAPS for DSM-IV (Blake et al., 1998) due to a traumatic event no less than six months prior to entering the trial. If a patient was on psychotropic medication, a stable regimen was required for at least two months prior to entering the trial. Participants were not allowed to receive other trauma-focused psychotherapy during the treatment phase. Age between 18 and 70 and fluency in German were further inclusion criteria. Exclusion criteria were psychotic, bipolar, substance-related, or severe personality disorders; current severe depressive disorder; severe cognitive impairment or a history of organic mental disorder; ongoing

traumatization; prominent current suicidal or homicidal ideation; and asylum-seeking status.

Measures

Severity of childhood trauma was measured by the short form of the Childhood Trauma Questionnaire (CTQ; Bernstein et al., 2003; Gast, Rodewald, Nickel, & Emrich, 2001). The CTQ is a 28-item retrospective measure of child abuse and neglect, each item is rated on a five-point Likert scale (1 = *never true* to 5 = *very often true*). A CTQ total score was calculated, Cronbach's alpha in the present sample was .94.

Lifetime trauma history (number of different types of trauma) and PTSD severity were assessed by the Posttraumatic Diagnostic Scale PDS (Foa, Cashman, Jaycox, & Perry, 1997). The PDS is a 49-item self-report questionnaire, which consists of four sections and assesses all of the DSM–IV criteria for PTSD. Part 1 is a trauma checklist that asks about a variety of traumatic events, part 2 evaluates the stressor criteria A1 and A2 according to the DSM–IV. Part 3 assesses the 17 PTSD symptoms experienced in the month prior to assessment on a four-point Likert scale, 0 = *not at all or only one time* to 3 = *5 or more times a week/almost always*. Part 4 assesses interference of the symptoms with different areas of life functioning. In this study, only parts 1 and 3 were applied. The PDS yields a total severity score ranging from 0 to 51. Cronbach's alpha in the present sample was .82.

For the assessment of PTSD the Clinician-Administered PTSD Scale (CAPS; Blake et al., 1998) was used by trained interviewers. The CAPS is a structured clinical interview

assessing the frequency and intensity of each of the 17 DSM–IV criteria for PTSD. This instrument has excellent psychometric properties and is considered the *gold standard* for diagnosing and measuring severity of PTSD. Axis I and Axis II psychiatric disorders (by the exception of PTSD) were established applying the Structured Clinical Interview for DSM–IV (SCID I + SCID II; First, Gibbon, Spitzer, & Williams, 1996; First, Spitzer, Gibbon, & Williams, 1996). All therapy sessions were videotaped, and adherence of treatment to manual was monitored based on 35 items according to Gersons et al.’s protocol (Gersons et al., 2000). Mean interrater reliability for two trained judges (one MA and one PhD student) independently rating a random set of four therapies was $kappa = .85$. An example of an adherence item from the opening session (psychoeducation) was: “The therapist explains why the patient’s partner has been invited to this session”. The item is rated positively by judges if at least two of three reasons are specified: (a) getting to know each other; (b) clarification of treatment goals to the partner; (c) explanation of partner’s role during therapy.

Procedure

Thirty patients fulfilled the inclusion criteria and were randomly assigned to either 16 sessions of BEPP ($n = 16$) or a minimal attention control condition ($n = 14$). As the control group received identical treatment after 16 weeks in the control condition, data from both groups were pooled for the current analyses. Pre-treatment, post-treatment and six month follow-up assessments each included an interview of approximately two hours duration and

a self-rating questionnaire. Furthermore, patients completed the PDS prior to every second therapy session, from session three onwards. Therapists were blind to pre-session ratings.

Statistical Analysis

Statistical tests were performed using IBM SPSS Statistics 25, SAS 9.4 M6 for exact regression analyses, and LISREL (PRELIS) for multiple imputation. Patients who responded to treatment (responders) were separated from those who did not (non-responders) by a median split on the pre-post treatment PDS score difference. This median ($Md = 8.0$) closely corresponded to the standard deviation of 8.5 of the mean pre-therapy PDS score.

Bivariate associations of response status with baseline parameters were assessed by t-tests and chi-square/Fisher's exact tests. Significant predictors of response status were entered in an explorative exact logistic regression analysis. General linear models (GLM) were used to test for differences in symptom severity between responders and non-responders at seven time points during psychotherapy while controlling for pre-treatment scores. The bivariate association of response status with adherence to manual during treatment during different treatment phases was assessed by independent samples t-tests. For ethical considerations, nationality was not included in statistical analyses in relation to treatment response.

Of the 30 patients enrolled in the randomized controlled trial, one patient from the control group declined treatment after completing 16 weeks in the control condition. One

patient completed the PDS only once, another patient only four out of ten times. These three patients were excluded from the current analysis. With respect to the PDS, 7.0% missing data from the remaining 27 patients were imputed applying an expected maximum algorithm. No deviations from normality were detected by Kolmogorov-Smirnov tests for continuous variables.

Results

Sample Description

Index traumatic events (i.e., the traumatic events presented as targets for treatment) included serious accidents ($n = 11$), violent sexual or non-sexual assaults ($n = 8$), non-combat-related war exposure ($n = 2$), natural disaster ($n = 1$), childhood trauma ($n = 1$), and other traumatic events ($n = 4$). Seventeen patients (63.0%) received a diagnosis of full-blown PTSD according to the CAPS, ten patients (37.0%) were diagnosed with subsyndromal PTSD. Mean PDS total score 33.3 ($SD = 8.5$). Sociodemographic, psychopathological and trauma related information is shown in Table 1. Reasons for being 100% unfit for work (eight patients, 29.6%) were PTSD in two cases, PTSD plus consequences of traumatic physical injuries in five cases, and non-trauma related somatic reasons in one case. Seventeen patients (63.0%) were diagnosed to suffer from comorbid axis I disorders, seven of them (41.2%) additionally received an axis II diagnosis. As for nationality, most non-Swiss patients were from the former Yugoslavia ($n = 7$), two from Germany and one from Turkey.

Treatment Utilization and Response

Patients received a mean of 15.5 ± 1.3 BEPP sessions. Five (18.5%) patients received fewer than 16 BEPP sessions. Three (11.1%) ended treatment after sessions 12 to 15 with the agreement of their therapists as they had showed sufficient clinical improvement. Two patients (7.4%) discontinued treatment against their therapists' advice after session 11 and 15, respectively, because they were dissatisfied with treatment results. Thirteen patients (48.2%) were classified as responders, fourteen (51.9%) as non-responders.

Prediction of Treatment Response

A lower educational level (obligatory school / apprenticeship) was negatively related to treatment response (Table 1). As the current work-related situation was almost significantly related to treatment response (Fisher's exact test, $p = .06$), each of its three levels was tested separately. Only complete inability for work was significantly related to treatment non-response (Fisher's exact test, $p < .05$). Both variables were entered as predictors for treatment response in an exact logistic regression analysis. Only lower educational levels (exact OR = 0.12; CI [0.01–0.95], $p < .05$) predicted treatment non-response significantly, as opposed to the inability for work (exact OR = 0.12; CI [0.00–1.75], $p = .17$).

Symptom Time Course in Responders and Non-responders

Figure 1 shows the course of symptoms (PDS mean values) from pre-treatment to follow-up assessment for the total sample as well as separately for responders and non-responders. GLMs testing for differences in PDS scores between responders and non-responders as assessed before sessions 3, 5, 7, 9, 11, 13, and 15, controlling for PDS pre-treatment scores, revealed the following picture: during the imaginal exposure phase, differences between responders and non-responders almost reached statistical significance (pre-session 3: $F(1, 27) = 3.0$, $p = .10$, partial eta square = .11; pre-session 5: $F(1, 27) = 3.7$, $p = .07$, partial eta square = .13; pre-session 7: $F(1, 27) = 2.9$, $p = .10$, partial eta square = .11). During the domain of meaning and integration, strong differences between both groups were present (pre-session 9: $F(1, 27) = 8.9$, $p < .01$, partial eta square = .27; pre-session 11: $F(1, 27) = 24.6$, $p < .001$, partial eta square = .51). This effect of response status was maintained during the concluding phase of the farewell ritual (pre-session 13: $F(1, 27) = 17.3$, $p < .001$, partial eta square = .42; pre-session 15: $F(1, 27) = 30.1$, $p < .001$, partial eta square = .56).

Adherence to Manual and Treatment Outcome

As one participant refused to have their treatment sessions recorded, data on the adherence to manual during treatment was available for 26 participants only. Table 2 shows adherence to manual during treatment for the four treatment phases (range 77.6%–90.6%)

as well as the overall adherence. Due to technical problems, one psychoeducation session was not recorded. Additionally, the sample size for the adherence to manual during the domain of meaning and integration and farewell ritual was slightly reduced due to drop-out. Adherence to manual was not associated with response status for psychoeducation ($t(23) = -0.48, p = .64$), exposure ($t(24) = 0.30, p = .77$), domain of meaning and integration ($t(23) = 0.48, p = .64$), farewell ritual ($t(22) = 1.1, p = .29$), or overall treatment ($t(24) = 0.17, p = .87$).

Discussion

This study tested predictors for treatment response in 27 patients undergoing Brief Eclectic Psychotherapy for PTSD. As suggested by Karatzias et al. (2007), not only pre-treatment characteristics but also process variables (symptom course, adherence to treatment) were tested for their relation to treatment outcome. Patients in our sample had been subjected to a broad range of traumatic events. PTSD baseline severity (mean PDS total score = 33.3, $SD = 8.5$) was comparable to a German validation sample of 86 trauma survivors suffering from PTSD ($M = 31.3, SD = 9.2$; Griesel, Wessa, & Flor, 2006). Psychiatric comorbidity was found in 63.0% of participants, and a substantial proportion of participants were non-Swiss citizens. Based on these characteristics, we can assume to present a clinically relevant sample not much different from naturalistic populations of patients suffering from trauma-related disorders typically seen by psychiatrists and psychotherapists in private practice. One exception to this statement may be the exclusion

of patients with less severe posttraumatic stress symptoms not qualifying for at least a sub-syndromal diagnosis of PTSD. Obviously, our results cannot be generalized to this group which may nevertheless consult mental health professionals due to trauma related distress and impairment.

A lower educational level (obligatory school / apprenticeship) and complete inability to work were each bivariately related to treatment non-response. In a multivariate analysis, only lower educational level significantly predicted treatment outcome. This is in line with a study by Rizvi, Vogt, and Resick (2009) reporting that a low level of education was related to higher dropout rates that can be considered as a related outcome measure. A contradictory result has been reported by Ehlers, Clark, Hackmann, McManus, & Fennell (2005). Here, low education was associated with better treatment outcome. However, these authors assumed that their finding might rather present a “chance finding” (p. 429). On the other hand, from a clinical perspective, both predictors match well with our experience from working with trauma survivors. Less practice in self-reflective thinking and expression of intra-psychic states as well as differences in linguistic styles are common challenges to the therapeutic working alliance. Work inability may, if due to physical injuries, cause difficulties to engage in imaginal exposure triggering somatic pain. Also, patients with a work-related day structure may cope more easily with the strains of trauma-focused psychotherapy due to their improved possibilities for distraction or social contacts. If replicated by further research, adaptations of BEPP (e.g., prolonged psychoeducation; different types of exposure; previous establishment of a day structure) need to be considered for patients with an increased risk for poor treatment outcome.

With respect to the course of symptoms over time, it is obvious from Figure 1 (line representing all subjects) that, on average, respondents showed a steady decline in symptoms throughout the course of treatment. This replicates the symptom time course under BEPP as reported by a recent large randomized controlled trial (Nijdam et al., 2012). This contrast to the course of symptoms under Prolonged Exposure might be related to differences in exposure technique aiming at catharsis (BEPP) rather than habituation (Prolonged Exposure). Of course, the stimulation of new learning processes (e.g., context learning; Steiger, Nees, Wicking, Lang, & Flor, 2015) might be a common denominator of both approaches. Between pre-treatment and the pre-session 3 assessment, a decrease of 4.1 points on the PDS (compare Figure 1) was observed in the group of responders. This decline after only two BEPP sessions (each one psychoeducation and imaginal exposure) corresponds to about half a standard deviation with respect to pre-treatment values. Over the same time period, non-responders reported virtually unchanged PTSD symptoms (increase of 0.2 points on the PDS). Until the end of the exposure phase (pre-session 7 assessment), responders showed a reduction of about one standard deviation (7.6 PDS points), more than three times the non-responders' treatment gains (2.5 points). Given the small sample size, these differences can be considered as indicating the possibility of early identification of treatment response even if they only approach statistical significance.

The statistical possibility of differentiating between treatment responders and non-responders opens an important area for further clinical research. The course of symptoms over time under trauma-focused psychotherapy should be regularly monitored. Future studies should test the validity of clinical judgments of symptom development as an

alternative source of information for treatment decisions. Of course, dichotomizing patients into responders and non-responders is a simplification which needs to be refined by future research. Continuous monitoring of larger samples could allow for identification of further response types as early vs. continuous vs. delayed response, non-response vs. deterioration of symptoms etc. by means of latent class analysis.

As evidenced by the GLMs' test statistics, the most pronounced differences between groups evolved after the completion of the imaginal exposure phase. This observation could be interpreted from two different perspectives. On the one hand, assuming that imaginal exposure is one of the most effective treatment components, its full impact on symptom levels may only become obvious after termination of exposure due to the ongoing triggering of stress symptoms. If this were the case, the BEPP protocol could be reduced to seven sessions of psychoeducation and imaginal exposure. On the other hand, it might not be sufficient to reexperience and express the traumatic emotions during the initial imaginal exposure phase, as the evoked emotions need to be successfully elaborated in the subsequent domain of meaning and integration.

Replicating findings by Marques et al. (2019), adherence to treatment was not related to response status. The fact that all session records (rather than only a sample) were scored adds to the weight of this statement. Even such a detailed analysis of adherence to manual during treatment in different treatment phases failed to reveal any indications of an association with response status. This could mean that, allowing in-the-moment flexibility of the therapists, in the context of good training or manual guidelines, does not harm outcome. This conclusion is in line with the finding by Marques et al. (2019) that a higher

number of treatment fidelity-consistent modifications was significantly related with higher reductions in PTSD symptoms. If confirmed by more naturalistic designs (effectiveness studies), the requirement of strict adherence to manual could be limited to the field of efficacy studies in order to reduce variability in therapeutic interventions. However, given the high level of experience amongst our study therapists, a ceiling effect might be at least in part responsible for our negative results. Less experienced therapists may experience larger benefits from adhering to a manual (Multon, Kivlighan, & Gold, 1996).

Several limitations need to be considered when interpreting our results. First of all, the small sample size limited the possibilities for more sophisticated analyses such as latent class analysis which would allow for identification of different response types. Also, due to the large range of index traumatic events, we were unable to control effects of type of trauma exposure on treatment response. In addition, the use of a median split to define responders/non-responders, instead of using clinically determined cut-off scores is a limiting factor. Second, our rather narrow focus on the course of symptoms over time and adherence to treatment should be expanded by future research including, for instance, aspects of the therapeutic working alliance (e.g., patients' perception of therapists' supportiveness) or aspects of the therapist-patient interaction (e.g., directiveness of interventions). In this sense, a pilot study (Nijdam, Baas, Olff, & Gersons, 2013) reported promising result on differences in approaching traumatic hotspots in relation to treatment success. Furthermore, due to the biweekly administration of the PDS, the effects of the psychoeducation (session 1) and the first exposure session (session 2) cannot be disentangled. Similarly, our design does not allow for a causal interpretation of the

observation that symptom course differed between responders and non-responders most strongly after the end of the exposure phase. Only a component control study will be able to disclose such effects. Finally, future research should consider further patient characteristics including treatment motivation or expectations.

Conclusions

Notwithstanding these limitations, we believe that our results meaningfully address the important topic of prediction and early recognition of the frequent treatment failures in the clinical work with patients suffering from PTSD. Furthermore, if replicated by more naturalistic designs, our results could contribute towards limiting the requirement of strict adherence to the manual to efficacy studies in PTSD treatment research.

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Predviđanje odgovora na psihoterapijski tretman postraumatskog stresnog
poremećaja: pilot studija

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Predviđanje odgovora na tretman psihoterapijom fokusiranom na traumu nije dalo zadovoljavajuće rezultate. Ova studija je procenjivala odgovor na tretman kratkom ekletičkom psihoterapijom za postraumatski stresni poremećaj u zavisnosti od varijabli koje su opisivale status osobe pre tretmana, progresije simptoma i pridržavanja protokola tokom sprovođenja terapije. Ispitivali smo razlike u varijablama koje opisuju status osobe pre tretmana i vremenskog toka simptoma između onih učesnika koji su reagovali na tretman i

onih koji nisu u grupi od 27 pacijenata, putem egzaktna regresione analize i opštih linearnih modela (GLM). Povezanost stepena u kom se psihoterapeut pridržavao protokola za sprovođenje tretmana za vreme različitih terapijskih faza i odgovora klijenta na tretman je ispitivana korišćenjem t-testa za nezavisne uzorke. Niži nivo obrazovanja i potpuna nesposobnost za rad su bili negativno povezani sa ishodom terapije. Vremenski tok simptoma se razlikovao između onih koji su reagovali i onih koji nisu reagovali na terapiju, pri čemu to koliko se psihoterapeut pridržavao protokola tokom sprovođenja tretmana nije bilo povezano sa ishodom ni u jednoj fazi tretmana. Naši rezultati govore da rano identifikovanje odgovora na psihoterapijski tretman može značajno da proširi prethodna znanja o prediktorima ishoda u psihoterapiji fokusiranoj na traumatu. Takođe, preporučuje se prilagođavanje protokola tretmana specifičnim grupama pacijenata sa povećanim rizikom za slabiji ishod psihoterapije. Ukoliko bi se studija replicirala u prirodnijim uslovima, rezultati bi mogli da doprinesu tome da se zahtev da se psihoterapeut tokom tretmana striktno pridržava protokola odnose samo na studije efikasnosti terapije posttrumatskog stresnog poremećaja.

Ključne reči: postrumatski stresni poremećaj (PTSP), kratka eklektička terapija za PTSP, predikcija, procesne varijable, pridržavanje protokola terapije

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Predicting treatment response in psychotherapy for PTSD

Table 1

Baseline sociodemographic and psychometric characteristics

		Total (<i>n</i> = 27)		Responders (<i>n</i> = 13)		Non-responders (<i>n</i> = 14)		Group comparison
		<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	
Sex:	Male	15	55.6	7	53.9	8	57.1	$\chi^2(1, N = 27) = 0.03, p = .86$
Living in a partnership		15	55.6	9	69.2	6	46.9	$\chi^2(1, N = 27) = 1.90, p = .17$
Work	Full / part time	13	48.1	8	61.5	5	35.7	Fisher's exact test, $p = .06$
	Unemployed / Homemaker /	6	22.2	4	30.8	2	14.3	
	Retired							
	100% unfit for work	8	29.6	1	7.7	7	50.0	
Lower education	(obligatory school / apprenticeship)	14	51.9	3	23.1	11	78.6	$\chi^2(1, N = 27) = 8.32, p < .01$
SCID I:	Mood disorder (current)	9	33.3	2	15.4	7	50.0	Fisher's exact test, $p = .44$
	Substance abuse (current)	1	3.7	1	7.7	0	0.0	
	Anxiety disorder (current)	13	48.1	6	46.2	7	50.0	
	Somatoform disorder (current)	6	22.2	1	7.7	5	35.7	
	Eating disorder (current)	2	7.4	0	0.0	2	14.3	
	Any Axis I disorder (current)	17	63.0	7	53.9	10	71.4	
SCID II:	Obsessive-compulsive	4	14.8	4	30.8	0	0.0	Fisher's exact test, $p = .21$
	Paranoid	2	7.4	2	15.4	0	0.0	
	Borderline	1	3.7	0	0.0	1	7.1	
	Antisocial	2	7.4	1	7.7	1	7.1	
	Any Axis II disorder	7	25.9	5	38.5	2	14.3	
Medication:	Antidepressants	6	22.2	3	23.1	3	21.4	
	Antipsychotics	1	3.7	1	7.7	0	0.0	
	Benzodiazepines	1	3.7	0	0.0	1	7.1	

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	Analgesics	4	14.8	1	7.7	3	21.4	
	Any concurrent medication	9	33.3	4	30.8	5	35.7	Fisher's exact test, $p = 1.0$
		M	SD	M	SD	M	SD	
Age:	years	43.1	15.5	41.1	13.2	45.0	15.9	$t(25) = -0.36, p = .73$
PDS:	Total score baseline	33.3	8.5	35.0	6.9	31.6	9.8	$t(25) = -1.02, p = .32$
	Number of trauma types	2.5	2.0	2.9	2.5	2.2	1.5	$t(24) = -0.77, p = .45$
	Years since trauma (3 outliers excluded)	2.1	1.6	2.2	1.7	2.0	1.5	$t(22) = -0.24, p = .81$
CTQ:	Total Score	44.4	19.0	46.6	18.1	42.2	20.4	$t(24) = -0.58, p = .57$

Note. SCID I+II = Structured Clinical Interview for DSM-IV, axes I and II; CTQ = Childhood Trauma Questionnaire; PDS = Posttraumatic Diagnostic Scale; BEP = Brief Eclectic Psychotherapy; n = sample size; M = mean; SD = standard deviation.

Predicting treatment response in psychotherapy for PTSD

Table 2

Treatment manual adherence

Adherence to treatment manual	Total sample		Responders		Non-responders	
	%	<i>SD</i>	%	<i>SD</i>	%	<i>SD</i>
overall (<i>n</i> = 26)	81.7	8.3	81.4	7.5	82.0	9.2
psychoeducation (<i>n</i> = 25)	77.6	16.2	79.4	15.3	76.2	17.4
exposure (<i>n</i> = 26)	80.1	12.7	79.3	10.9	80.8	14.4
domain of meaning and integration (<i>n</i> = 25)	88.7	11.5	87.5	12.6	89.7	10.9
farewell ritual (<i>n</i> = 24)	90.6	17.8	86.4	20.5	94.2	15.0

Note. *SD* = standard deviation; *n* = sample size.

Predicting treatment response in psychotherapy for PTSD

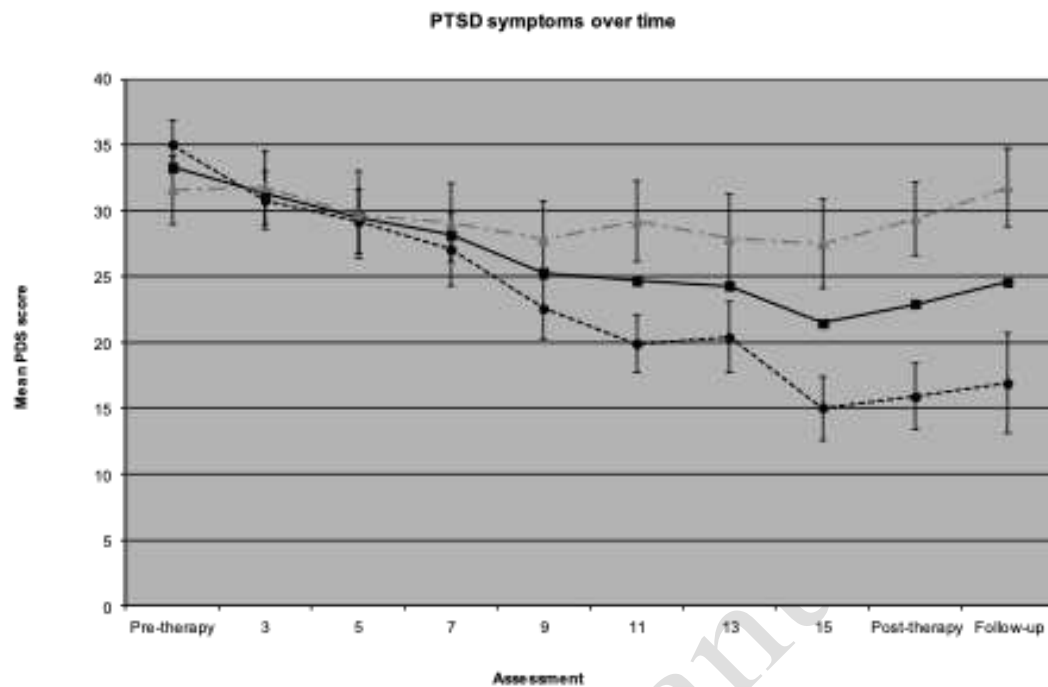


Figure 1. Posttraumatic Diagnostic Scale (PDS) mean values and standard errors for responders (---; $n = 13$), non-responders (- - -; $n = 14$), and total sample (—; $n = 27$). Assessment: numbers refer to the respective pre-session assessment.